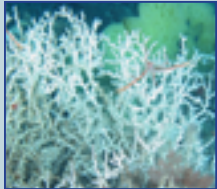


About Deep-Sea Corals



Black corals often resemble bushes or trees, and may include the oldest living marine organisms. This black coral off Hawaii was estimated to be over 4,000 years old.



Deep-sea **stony corals** range from small individual cup corals to a few species, like this *Lophelia pertusa* colony off Eastern Florida, that contribute to extensive deep-water reefs.



Gold corals, which belong to a single genus, *Gerardia*, are sometimes collected for jewelry. They are unique in that they appear to grow on the skeletons of other deep-sea corals and can live for thousands of years.



Gorgonians, like this fan-shaped colony of **red coral** (*Corallium* sp.) on Davidson Seamount, are among the most diverse deep-sea corals.



Sea pens, like these off Alaska, are related to **gorgonians**, but unlike most other deep-sea corals they live in soft sediments where they can form large fields.



Lace corals, like these off California, are actually hydroids and only distantly related to other corals.

Deep-sea corals can live for hundreds or thousands of years, creating remarkably complex communities in the depths of the oceans from where the light is dim to more than 10,000 feet below. In the United States, deep-sea coral habitats have been discovered in all regions on continental shelves and slopes, canyons, and seamounts. Their full geographic extent is still unknown because most areas have yet to be adequately surveyed.

Some deep-sea coral species form reefs that, over millennia, can grow more than 300 feet tall. Other species shaped like bushes or trees can form assemblages similar to groves or forests on the seafloor.

Nationwide, these complex structures provide habitat for many fish and invertebrate species, including certain commercially important ones like grouper, snapper, sea bass, rockfish, shrimp, and crab. Moreover, organisms that live in deep-sea coral habitats produce chemicals with great potential for biomedical uses, and some deep-sea coral species have commercial value as jewelry and art objects.

Most deep-sea corals grow extremely slowly. Once damaged, the corals and the communities they support may take centuries to recover, if they recover at all. Deep-sea corals are vulnerable to disturbance caused by fishing gears such as bottom trawls that contact the seafloor. They can also be damaged by activities associated with energy exploration and development, cable deployment, and other activities that disturb the seafloor. Additionally, ocean acidification—a result of the ocean absorbing increased carbon dioxide—can adversely affect corals' ability to grow or maintain their structures.